

REMARKS

Applicant has carefully studied the outstanding Official Action. The present response is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

The Abstract is objected to. A corrected Abstract is enclosed.

Claims 6, 16 and 32 stand rejected under 35 U.S.C. § 112, second paragraph, because of missing or unclear antecedents. These claims have been amended to provide clear antecedents. Claim 26 also has been amended for the same reason.

Claims 1 - 2, 4, 6, 10 - 11, 13 and 16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Furuyama '979. Claims 3, 5, 7-9, 12, 14-15, 17-19, 30-32, and 35 stand rejected under 35 U.S.C. § 103 as being unpatentable over Furuyama.

Applicant wishes to thank the Examiner for the courtesy of an interview granted to Applicant's representative, Sanford T. Colb, on 26 November 2001. The Interview Summary Record states that the following language will be added to claim 1: "microstructure receives light via said at least one transparent packaging layer". This amendment adds the above language to claim 1.

Independent claims 10 and 20 have been amended so as to be of similar scope to claim 1 as amended.

New independent claim 37 combines the recitations of claims 1 and 10.

Furuyama '979 describes an optical semiconductor module including an optical semiconductor element 6, an IC 7 driving element 6, an optical fiber, a monocrystalline

substrate 1, airtight sealing insulators 12 and 14, an airtight sealing member 16 and a reinforcing plate. Light is transmitted through the optical semiconductor element and the optical fiber which are mounted on the substrate.

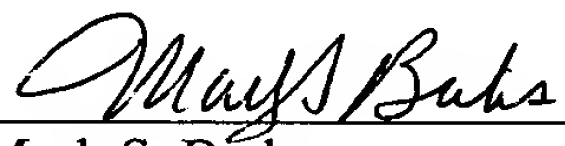
Furuyama does not show or suggest at least one transparent packaging layer sealed over a microstructure wherein the microstructure receives light through the transparent layer.

Therefore, claim 1 which recites this feature is clearly patentable. The remaining independent claims are of similar scope. The dependent claims in the case recite additional patentable subject matter, and therefore, the dependent claims are deemed patentable a fortiori.

Applicant has carefully studied the remaining prior art of record herein and concludes that the invention as described and claimed in the present application is neither shown in nor suggested by the cited art.

In view of the foregoing remarks, all of the claims are believed to be in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

Respectfully submitted,



Mark S. Bicks
Reg. No. 28,770

ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.
1300 19th Street, N.W., Suite 600
Washington, D.C. 20036
(202) 659-9076

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MAKED-UP VERSION



1. (Amended) A crystalline substrate based device comprising:
a crystalline substrate having formed thereon a microstructure; and
at least one transparent packaging layer which is sealed over said microstructure by means of an adhesive and defines therewith at least one gap between said crystalline substrate and said at least one packaging layer,
wherein said microstructure receives light via said at least one transparent packaging layer.

Claims 5, 15 and 25 have been cancelled without prejudice.

Claim 6, line 2, "cavity" deleted, --gap-- substituted;
"cavities" deleted; --gaps-- substituted.

Claim 10 has been amended as follows:

10. (Amended) A chip scale packaged crystalline substrate comprising:
a substrate having formed thereon a microstructure; and
at least one chip scale package which is sealed over said microstructure and defines therewith at least one gap,
and wherein said at least one package is at least partially transparent.



Claim 20 has been amended as follows:

20, (Amended) A method of producing a crystalline substrate based device comprising:

providing a microstructure on a substrate; and

adhesively sealing at least one packaging layer over said microstructure and at least partially spaced therefrom, thereby to define a gap between said microstructure and said at least one packaging layer,

wherein said at least one packaging layer is transparent.

Claim 16, line 2, "cavity" deleted, --gap-- substituted;
"cavities" deleted; --gaps-- substituted.

Claim 26, line 2, "cavity" deleted, --gap-- substituted;
"cavities" deleted; --gaps-- substituted.

Claim 32, "chip scale packaged crystalline substrate" deleted, --device-- substituted.

New claim 37 has been added.

ABSTRACT OF THE DISCLOSURE

~~This invention discloses~~ ^A crystalline substrate based device including a crystalline substrate having formed thereon a microstructure, ^{a transparent} and ~~at least one~~ packaging layer which is sealed over the microstructure by ~~means of~~ an adhesive and defines therewith at least one gap between the crystalline substrate and the ~~at least one~~ packaging layer. *the microstructure receives light via the*

~~A method of producing a crystalline substrate based device is also disclosed.~~
transparent packaging layer

